

In the Specification:

~~N~~E Page 1, in the cross reference to related applications, after "Application Serial No. 08/736,161 filed on October 25, 1996," insert -- now Patent No. 5,828,197, --.

Page 10, line 19, change "co-pending patent application Serial No. 08/664,086" to -- U.S. Patent No. 6,028,593 --.

Page 18, line 16, change "Application Serial No. 08/275,120" to -- No. 5,623,582 --.

Page 19, line 22, change "co-pending patent application 08/374,288" to -- U.S. Patent No. 5,731,804 --.

Page 26, line 16, change "Application Serial No. 08/461,170, Atty Docket No. 08/461,170" to -- No. 5,576,727 --.

Page 26, line 33, change "co-pending patent application 08/374,288" to -- U.S. Patent No. 5,731,804 --.

Page 27, line 1, change "co-pending patent application 08/374,288" to -- U.S. Patent No. 5,731,804 --.

Page 28, line 9, change "co-pending patent application 08/566,282, Atty docket no. IMM1P014" to -- U.S. Patent No. 5,734,373 --.

In the Claims:

Applicant presents all pending claims below for the convenience of the Examiner. Claims which have been changed by this amendment are labelled as "amended."

1. An interface apparatus for interfacing motion of a user manipulable object with a computer system, said interface apparatus comprising:

~~N~~E a user manipulable object being physically contacted by a user;

a 3-D spatial mechanism coupled to said user object and including a plurality of members including a ground member coupled to a ground, said spatial mechanism providing at least three degrees of freedom to said user manipulable object with respect to said ground;

three actuators rigidly coupled to said ground and coupled to said spatial mechanism, said actuators operative to apply forces in said three degrees of freedom to said user manipulable object in response to electrical signals from said computer system; and

a sensor for detecting a position of said user manipulable object in three-dimensional space and for outputting sensor signals to said computer system.

